

What is claimed is:

1 1. A communication method comprising the steps of:
2 providing a first executable application at a server, the first executable application
3 requiring a first amount of memory for proper execution;
4 executing a second executable application at a client, the second executable
5 application occupying a second amount of memory;
6 providing a first data portion at a client, the first data portion occupying a third
7 amount of memory, the first data portion being accessible by the second executable
8 application;
9 providing a second data portion at a client, the second data portion having a lower
10 priority than the first data portion, the second data portion occupying a fourth amount of
11 memory, the second data portion being accessible by the second executable application;
12 receiving an input at the client, the input corresponding to the first executable
13 application on the server; and
14 determining, in response to receiving the input, whether the client has sufficient
15 available memory for execution of the first executable application.

1 2. The method of claim 1, wherein the step of providing the first data portion
2 further comprises the step of:
3 providing a current program data file.

1 3. The method of claim 2, wherein the step of providing the second data
2 portion further comprises the step of:
3 providing a future program data file.

1 4. The method of claim 1, further comprising the step of:
2 downloading the first executable application in response to determining that the
3 client has sufficient available memory for execution of the first executable application.

1 5. The method of claim 1, further comprising the steps of:
2 purging the second data portion from the memory in response to determining that
3 the client has insufficient available memory for execution of the first executable
4 application; and
5 deciding, in response to purging the second data portion, whether the client has
6 sufficient available memory for execution of the first executable application.

1 6. The method of claim 5, further comprising the step of:
2 downloading the first executable application in response to deciding that the client
3 has sufficient available memory for execution of the first executable application.

1 7. The method of claim 5, further comprising the steps of:
2 purging the first data portion from the memory in response to further determining
3 that the client has insufficient available memory for execution of the first executable
4 application; and
5 assessing, in response to purging the first data portion, whether the client has
6 sufficient available memory for execution of the first executable application.

1 8. The method of claim 7, further comprising the step of:
2 downloading the first executable application in response to assessing that the
3 client has sufficient available memory for execution of the first executable application.

1 9. The method of claim 7, further comprising the steps of:
2 purging the second executable application from the memory in response to
3 assessing that the client has insufficient available memory for execution of the first
4 executable application; and
5 evaluating, in response to purging the second executable application, whether the
6 client has sufficient available memory for execution of the first executable application.

1 10. The method of claim 9, further comprising the step of:
2 downloading the first executable application in response to evaluating that the
3 client has sufficient available memory for execution of the first executable application.

1 11. A communication system comprising:
2 a client having a tuner, the client being capable of receiving broadcast
3 information, the client being in bi-directional communication with a server, the server
4 having an executable application, the executable application requiring an amount of
5 memory for proper execution; and
6 a memory manager in the client, the memory manager being configured to
7 determine whether the client has sufficient available memory for proper execution of the
8 executable application, the server being configured to transmit the executable application
9 in response to the memory manager determining that the client has sufficient memory for
10 proper execution of the executable application.

1 12. A communication method comprising the steps of:
2 establishing a bi-directional communication pathway between a client and a
3 server, the client having a tuner, the client being capable of receiving broadcast
4 information, the server having an executable application, the executable application
5 requiring an amount of memory for proper execution;
6 receiving an input at the client, the input corresponding to the executable
7 application on the server; and
8 determining, in response to receiving the input, whether the client has sufficient
9 available memory for proper execution of the executable application.

1 13. The method of claim 12, wherein the memory is a volatile memory.

1 14. The method of claim 12, further comprising the steps of:
2 allocating the required amount of memory from the available memory in response
3 to determining that the client has sufficient available memory for proper execution of the
4 executable application; and
5 requesting the executable application from the server upon allocating the required
6 amount of memory.

1 15. The method of claim 12, further comprising the steps of:
2 purging data contained in the memory in response to determining that the client
3 has insufficient available memory for proper execution of the executable application; and
4 determining, in response to purging the data, whether the client has sufficient
5 available memory for proper execution of the executable application.

1 16. The method of claim 15, further comprising the steps of:
2 purging a pre-existing application contained in the memory in response to
3 determining that the client has insufficient available memory for proper execution of the
4 executable application after purging data contained in the memory; and
5 determining, in response to purging the pre-existing application, whether the client
6 has sufficient available memory for proper execution of the executable application.

1 17. The method of claim 15, wherein the step of purging data comprises the
2 step of:
3 purging the memory in accordance with a dynamic list of priorities.

1 18. The method of claim 15, wherein the step of purging the memory
2 comprises the steps of:
3 purging a data file having television viewing information for future days prior to
4 purging a data file having television viewing information for a current day; and
5 purging a data file having television viewing information for a current day prior to
6 purging an application loaded upon initialization.

1 19. The method of claim 15, further comprising the steps of:
2 iteratively repeating the purging and determining steps until the client has
3 sufficient available memory for proper execution of the executable application;
4 allocating the required amount of memory from the available memory in response
5 to determining that the client has sufficient available memory for proper execution of the
6 executable application; and
7 requesting the executable application from the server upon allocating the required
8 amount of memory.

1 20. The method of claim 15, wherein the step of purging the data comprises
2 the step of purging data in accordance with a dynamic list of priorities.

1 21. The method of claim 12, further comprising the steps of:
2 purging a pre-existing application contained in the memory in response to
3 determining that the client has insufficient available memory for proper execution of the
4 executable application; and
5 determining, in response to purging the pre-existing application, whether the client
6 has sufficient available memory for proper execution of the executable application.

1 22. The method of claim 21, further comprising the steps of:
2 iteratively repeating the purging and determining steps until the client has
3 sufficient available memory for proper execution of the executable application;
4 allocating the required amount of memory from the available memory in response
5 to determining that the client has sufficient available memory for proper execution of the
6 executable application; and
7 requesting the executable application from the server upon allocating the required
8 amount of memory.

1 23. The method of claim 21, wherein the step of purging the pre-existing
2 application comprises the step of purging the memory in accordance with a dynamic list
3 of priorities.

1 24. The method of claim 12, further comprising the steps of:
2 compacting a private heap in response to determining that the client has
3 insufficient available memory for proper execution of the executable application; and
4 determining, in response to compacting the private heap, whether the client has
5 sufficient available memory for proper execution of the executable application.

1 25. The method of claim 12, further comprising the steps of:
2 compacting a system heap in response to determining that the client has
3 insufficient available memory for proper execution of the executable application; and
4 determining, in response to compacting the system heap, whether the client has
5 sufficient available memory for proper execution of the executable application.

1 26. A communication method comprising the steps of:
2 establishing a bi-directional communication pathway between a client and a
3 server, the client having a tuner, the client being capable of receiving broadcast
4 information, the server having an executable application, the executable application being
5 executable using a normal amount of memory, the executable application further being
6 executable using a reduced amount of memory;
7 receiving an input at the client, the input corresponding to the executable
8 application on the server; and
9 determining, in response to receiving the input, whether the client has sufficient
10 available memory for execution of the executable application using the normal amount of
11 memory.

1 27. The method of claim 26, further comprising the steps of:
2 allocating the normal amount of memory from the available memory in response
3 to determining that the client has sufficient available memory for execution of the
4 executable application using the normal amount of memory; and
5 requesting the executable application from the server upon allocating the normal
6 amount of memory.

1 28. The method of claim 26, further comprising the steps of:
2 determining, in response to determining that the client has insufficient available
3 memory for execution of the executable application using the normal amount of memory,
4 whether the client has sufficient available memory for execution of the executable
5 application using the reduced amount of memory.

1 29. The method of claim 28, further comprising the steps of:
2 allocating the reduced amount of memory from the available memory in response
3 to determining that the client has sufficient available memory for execution of the
4 executable application using the reduced amount of memory; and
5 requesting the executable application from the server upon allocating the reduced
6 amount of memory.

1 30. The method of claim 28, further comprising the steps of:
2 purging data contained in the memory in response to determining that the client
3 has insufficient available memory for execution of the executable application using the
4 reduced amount of memory; and
5 determining, in response to purging the data, whether the client has sufficient
6 available memory for execution of the executable application using the reduced amount
7 of memory.

1 31. The method of claim 30, further comprising the steps of:
2 iteratively repeating the purging and determining steps until the client has
3 sufficient available memory for execution of the executable application using the reduced
4 amount of memory;
5 allocating the reduced amount of memory from the available memory in response
6 to determining that the client has sufficient available memory for execution of the
7 executable application using the reduced amount of memory; and
8 requesting the executable application from the server upon allocating the reduced
9 amount of memory.

1 32. The method of claim 30, wherein the step of purging the data comprises
2 the step of purging data contained in memory in accordance with a dynamic list of
3 priorities.

1 33. The method of claim 28, further comprising the steps of:
2 compacting a private heap in response to determining that the client has
3 insufficient available memory for execution of the executable application using the
4 reduced amount of memory; and
5 determining, in response to compacting the private heap, whether the client has
6 sufficient available memory for execution of the executable application using the reduced
7 amount of memory.

1 34. The method of claim 28, further comprising the steps of:
2 purging a pre-existing application contained in the memory in response to
3 determining that the client has insufficient available memory for execution of the
4 executable application using the reduced amount of memory; and
5 determining, in response to purging the pre-existing application, whether the client
6 has sufficient available memory for execution of the executable application using the
7 reduced amount of memory.

1 35. The method of claim 34, further comprising the steps of:
2 iteratively repeating the purging and determining steps until the client has
3 sufficient available memory for execution of the executable application using the reduced
4 amount of memory;
5 allocating the reduced amount of memory from the available memory in response
6 to determining that the client has sufficient available memory for execution of the
7 executable application using the reduced amount of memory; and
8 requesting the executable application from the server upon allocating the reduced
9 amount of memory.

1 36. The method of claim 34, wherein the step of purging the pre-existing
2 application comprises the step of purging the pre-existing application in accordance with
3 a dynamic list of priorities.

1 37. The method of claim 28, further comprising the steps of:
2 compacting a system heap in response to determining that the client has
3 insufficient available memory for execution of the executable application using the
4 reduced amount of memory; and
5 determining, in response to compacting the system heap, whether the client has
6 sufficient available memory for execution of the executable application using the reduced
7 amount of memory.

1 38. A communication method comprising the steps of:
2 establishing a bi-directional communication pathway between a client and a
3 server, the client having a tuner, the client being capable of receiving broadcast
4 information, the server having an executable application, the executable application
5 requiring an amount of memory for proper execution, the server being configured to
6 retransmit data over sequential time intervals;
7 receiving an input at the client, the input corresponding to the executable
8 application on the server; and
9 determining, in response to receiving the input, whether the client has sufficient
10 available memory for execution of the executable application.